

# **EPA - NEW ENGLAND ENVIRONMENTAL GOALS**

**FINAL**

## **Key Strategies and EPA Actions for Rhode Island For FY 2002 - 2003**



To support the  
Rhode Island Department of Environmental Management  
and the  
Rhode Island Department of Health

August 6, 2001

# INTRODUCTION

This Environmental Goals and Strategies document was developed by the U.S. Environmental Protection Agency - New England Office. EPA-NE has organized a substantial portion of its work around four environmental goals:

- Clean and Healthy Water,
- Clean and Healthy Air,
- Healthy Communities, and
- Healthy Ecosystems.

These goals are consistent with GPRA goals, but are meant to focus more exclusively environmental ends whereas some of the GPRA goals are focused more on strategies, the means we use, to accomplish our work.

Our environmental goals form the foundation of the Regional Strategic Framework where we have endeavored to capture approximately 80% of the work in the Region, and align the work with its essential purpose - the desired environmental result. Additionally our Strategic Framework describes the tools (the how's of doing our work) and the measures we use to determine if we are making progress using our tools. We built our Framework with the input of many EPA New England managers and staff experts. It is primarily an internal planning document but increasingly it is being used to inform our partners about our strategies and priorities. We are using our Strategic Framework now to help inform our PPA negotiations with Rhode Island and to advance our efforts to plan and set priorities collaboratively with the State.

For each goal we present the long-term objective along with the environmental or public health outcome expected in Rhode Island. We also include targets for which we hope to achieve specific environmental results within a projected time frame as well as indicators which will measure our progress along the way. Under each objective is a list of strategies and corresponding EPA actions we will undertake in Rhode Island in FY2002/2003.

The purpose of this document is to set forth EPA's plan for our programs and activities and how we propose to allocate resources in Rhode Island. This document will serve to negotiate with our State Agency partners a mutual set of strategies and measures for the FY2002/2003 Performance Partnership Agreement.

## **EPA NEW ENGLAND ENVIRONMENTAL GOALS STRATEGIES AND EPA ACTIONS FOR RHODE ISLAND**

### **GOAL I: CLEAN AND HEALTHY WATER**

#### **Drinking Water & Surface Water**

##### **Subgoal: Drinking Water**

**Objective #1 *Water Systems Compliance:*** Increase % of PWS systems meeting microbial and other health based standards.

**Objective #2: *Protection of Public Drinking Water:*** Protect public drinking water from pollution.

**Objective #3: *Aquifer Protection:*** Maintain or restore groundwater for future use in other than source water areas.

##### **Subgoal: Surface Water**

**Objective #1: *Restore Water Quality:*** Restore water quality in impaired waters.

**Objective #2: *Maintain Water Quality:*** Maintain surface water quality.

**Objective #3: *Monitor Water Quality:*** Maintain effective monitoring programs.

### **GOAL II: CLEAN AND HEALTHY AIR**

**Objective #1 *Ozone:*** Reduce ozone exceedence days in each non-attainment area.

**Objective #2 *Particulate Matter:*** Reduce regional haze and unhealthy levels of particulate matter.

**Objective #3 *Criteria Air Pollutants:*** Maintain healthy ambient levels of criteria air pollutants (CO, SO<sub>2</sub>, NO<sub>2</sub>, Lead).

**Objective #4 *Air Toxics:*** Reduce ambient levels of, and exposure to, air toxics.

**Objective #5 *Healthy Climate/Atmosphere:*** Reduce CO<sub>2</sub> and Non-CO<sub>2</sub> greenhouse gas emissions.

**Objective #6: *Atmospheric Deposition*** Reduce deposition of acid rain and mercury from atmosphere onto land and water bodies.

### **GOAL III: HEALTHY COMMUNITIES**

#### ***HEALTHY HUMAN COMMUNITIES***

**Objective #1 *Healthy Children:*** Protect children from environmental health threats by improving the quality of the environments where children spend their time: at school, at home and outdoors.

**Objective #2 *Livable Communities:*** Restore, revitalize, and protect urban environments, and reduce sprawl in suburban and rural areas.

**Objective #3 *Toxic Substances & Pesticides:*** Reduce exposure to and pesticides and toxic substances.

**Objective #4: *Waste Sites:*** Make previously polluted sites safe for communities.

#### ***SUSTAINABLE REGULATED COMMUNITIES***

**Objective 5: *Increase Compliance in the Regulated Community:*** Reduce pollution across media through increased compliance.

**Objective 6: *Sustainable Performance in the Regulated Community:*** Decrease pollution across media through sustainable performance and behavior change.

### **GOAL IV: HEALTHY ECOSYSTEMS**

**Objective #1 *Aquatic Ecosystems:*** Increase quantity and quality of our aquatic ecosystems: wetlands, fresh water habitats, and marine habitats including eelgrass beds.

**Objective #2 *Diverse Habitats and Sensitive Development:*** Permanently protect habitat, sensitively develop unprotected land.

**Objective #3 *Protect Marine Habitats:*** Minimize adverse impact from marine dredging and disposal of materials.

## GOAL I: CLEAN AND HEALTHY WATER

**Subgoal: Drinking Water**

**Objective 1: Water Systems Compliance:** Increase % of PWS systems meeting microbial and other health based standards.

**Public Health Outcome:**

Citizens of Rhode Island will have clean, healthy and safe drinking water all of the time and public water systems will achieve compliance with all drinking water quality standards.

**Targets:**

- By 2005, all Rhode Island public water systems will meet Safe Drinking Water standards.

**Public Health Indicator:**

- Refer to RI DOH - Healthy People 2000

KEY STRATEGIES	KEY ACTIONS
1. Support implementation and enforcement of regulatory requirements under the SDWA with RI DOH and appropriate partners.	<ul style="list-style-type: none"><li>• EPA-NE will provide technical assistance and training to RI DOH to develop new regulations for drinking water standards from the 1996 SDWA amendments.</li><li>• EPA-NE will assist RI DOH to adopt new rules.</li><li>• EPA-NE will review all submitted primacy revisions packages.</li><li>• EPA-NE will review RI DOH's laboratory certification regulation.</li><li>• EPA-NE will continue to provide technical assistance in lab related issues.</li><li>• EPA-NE will conduct one or two follow-up inspections of RI DOH Laboratories.</li><li>• EPA-NE will assist RI DOH in developing electronic data interchange capability.</li></ul>

KEY STRATEGIES	EPA ACTIONS
<p>1. <b>(Continued)</b> Support implementation and enforcement of regulatory requirements under the SDWA with RI DOH and appropriate partners.</p>	<ul style="list-style-type: none"> <li>• EPA-NE will review data tracking system in RI DOH.</li> <li>• EPA-NE will assist RI DOH in evaluating the SDWIS state database and assist with computer support.</li> <li>• EPA-NE will develop a budgeting software for small systems.</li> <li>• EPA-NE will continue to work with Drinking Water Academy to develop training modules for various drinking water related topics.</li> </ul>
<p>2. Implement technical assistance efforts with organizations/agencies to achieve public water system compliance.</p>	<ul style="list-style-type: none"> <li>• EPA-NE will continue to promote dialogue among key players.</li> <li>• EPA-NE will facilitate technology transfer.</li> <li>• EPA-NE will continue to work with water professional experts to assist small systems.</li> <li>• EPA-NE will continue to support training in regulatory requirements and water treatment technique using multiple-barrier approach.</li> <li>• EPA-NE will develop a new technology list server.</li> </ul>
<p>3. Provide technical and financial support to assure compliance with SDWA requirements.</p>	<ul style="list-style-type: none"> <li>• EPA-NE will in 2002, work with RI DOH and the RI CWFA to achieve adequate number of loans given to water systems.</li> <li>• EPA-NE will assist the State Agencies in developing mechanisms for financial assistance to small water systems.</li> <li>• EPA-NE will work with RI DOH and Atlantic States Rural Water Associations to assist small systems in the needs assessment as well as the SRF loan process.</li> <li>• EPA-NE will continue to fund the PWSS program.</li> </ul>

## GOAL I: CLEAN AND HEALTHY WATER

**Subgoal: Drinking Water**

**Objective 2: Protection of Public Drinking Water:** Protect public drinking water from pollution, including both groundwater and surface water supplies.

**Environmental Outcome:**

All Rhode Island residents have access to safe drinking water.

**Target:** By 2005, protect 10 new drinking water recharge areas through acquisition, easements, or other controls on pollution inputs to the supplies.

**Indicators:**

- Number of acres of land acquired
- Number of local measures implemented to protect drinking water supplies
- Number of towns adopting and implementing drinking water protection programs.
- Reduction of pollutants in drinking water protection areas from TRI database.
- Reduction of VOC detections in public drinking water supplies.

KEY STRATEGIES	EPA ACTIONS
1. Enhance and support the implementation of drinking water protection programs in Rhode Island	<ul style="list-style-type: none"><li>• EPA-NE will work with RI DEM to assist towns with completed Source Water Assessments to implement Wellhead Protection/Source Water Protection plans, i.e., Burrillville.</li><li>• Provide technical assistance to at least three local communities/water utilities to promote local drinking water protection initiatives.</li><li>• Pursue one source water assessment pilot project with HQ funding in Rhode Island.</li><li>• EPA-NE will in 2002, explore funding and leverage resources with federal partners, e.g., URI/CE, to implement drinking water protection initiatives in Rhode Island.</li></ul>

KEY STRATEGIES	EPA ACTIONS
2. Pursue land acquisition programs in drinking water recharge areas and leverage EPA support.	<ul style="list-style-type: none"> <li>Utilize the option of the drinking water SRF to acquire land in recharge areas.</li> </ul>
3. Identify and map potential sources of contamination and threats to drinking water quality and implement projects that will result in improvement to drinking water quality in Rhode Island.	<ul style="list-style-type: none"> <li>EPA-NE will target UST and RCRA inspections in consultation with RI DEM, and RI DOH in drinking water protection areas.</li> <li>EPA-NE will complete an inventory of CERCLIS, RCRA and NPL facilities in drinking water areas by the end of 2002.</li> <li>EPA-NE will begin to prioritize site assessment decisions at CERCLIS sites in sole source aquifers and drinking water protection areas by the end of 2002.</li> <li>EPA-NE will monitor implementation of the corrective action program for the Stafford Pond Watershed Restoration Plan (TMDL).</li> <li>EPA-NE will complete the Kickemuit Watershed Restoration Plan in 2002 and begin to implement WQ improvement actions with the NRCS in Massachusetts and Rhode Island.</li> <li>EPA-NE will begin investigation at the JM Mills Landfill as part of the Peterson/Puritan Superfund Site in 2002.</li> </ul>
4. Pursue enforcement and/or compliance assistance actions on sources/facilities that threaten drinking water quality in drinking water protection areas	<ul style="list-style-type: none"> <li>Based upon inspections, EPA-NE will pursue appropriate enforcement/ compliance assistance to regulated facilities.</li> </ul>
5. Implement education programs and outreach initiatives to business/industries in drinking water protection areas.	<ul style="list-style-type: none"> <li>EPA-NE will complete, distribute, and provide training on the business drinking water protection video and workbook in Rhode Island.</li> <li>EPA-NE will encourage participation in the environmental and education and business drinking water awards programs</li> </ul>
6. Ensure that data collected to support drinking water protection in Rhode Island is of good quality and sound science.	<ul style="list-style-type: none"> <li>EPA-NE will review Quality Assurance Project Plans within 60 days of submittal.</li> <li>EPA-NE will participate as appropriate in field monitoring studies to protect drinking water supplies in consultation with RI DOH and RI DEM, i.e., TMDL's, etc.</li> </ul>



## GOAL I: CLEAN AND HEALTHY WATER

**Subgoal:**     **Drinking Water**

**Objective 3:** **Aquifer Protection:** Maintain or restore groundwater for future use in other than source water areas.

**Environmental Outcome:**

Rhode Island's groundwater resources will be maintained or restored consistent with the State Groundwater Classification System.

**Targets:**

- By June 2005, 3 additional communities will have adopted local aquifer protection by-laws.
- By 2005, towns will have acquired 100 additional acres of protected land in high yield aquifers (GAA/GA).
- By 2010, towns will have restored 100 acres of contaminated groundwater areas to GB.

**Indicators:**

- % increase of groundwater classified as GAA or GA.
- Reduction of nutrients to groundwater from septic systems and fertilizer.
- Reduction of VOC detections in groundwater.

KEY STRATEGIES	EPA ACTIONS
1. Implement groundwater management strategies and programs to protect groundwater resources.	<ul style="list-style-type: none"><li>• EPA-NE will participate on WUSG Action Plan planning and implementation; follow-up on USGS modeling in South County.</li><li>• EPA-NE will participate with South County Green space project.</li><li>• EPA-NE will review in 2002 the state's Ground Water Protection Strategy, within 60 days after submittal.</li><li>• EPA-NE will assist RI DEM to finalize the Pesticides in Ground Water Strategy.</li></ul>

KEY STRATEGIES	EPA ACTIONS
<p>1. <b><u>Continued:</u></b> Implement groundwater management strategies and programs to protect groundwater resources.</p>	<ul style="list-style-type: none"> <li>EPA-NE expects to conduct approximately 10 SSA reviews; coordinate with RI DEM and Federal Agencies.</li> <li>EPA-NE will participate on ISDS Regulatory Work Group to confer on, revise and improve regulations for groundwater protection.</li> <li>EPA-NE will provide education and outreach (BMPs) to those industries listed as potential sources of groundwater contamination, i.e., salt storage facilities.</li> <li>EPA-NE and RI DEM will assist Rhode Island towns in developing/implementing aquifer protection by-laws.</li> </ul>
<p>2. Conduct inspections and investigations of sources that impact groundwater quality.</p>	<ul style="list-style-type: none"> <li>EPA-NE will review Rhode Island's 2000 305(b) report to target inspections to the 10 highest priority sources of groundwater contamination.</li> </ul>
<p>3. Implement programs that will result in groundwater restoration.</p>	<ul style="list-style-type: none"> <li>EPA-NE will assist RI DEM to achieve RCRA Authorization and RCRA Corrective Action delegation in 2002.</li> <li>EPA-NE in 2002, will make a remedy decision from offsite impacts from Central Landfill.</li> </ul>

## GOAL I: CLEAN AND HEALTHY WATER

**Subgoal:** Surface Water

**Objective 1: Restore Water Quality:**

Restore water quality in impaired waters.

**Environmental Outcome:**

All Rhode Island waters are safe for recreational uses, fish and shellfish consumption, and support aquatic life.

**Target:**

- By 2002, the state's permit backlog (majors) will be entirely eliminated.
- By 2008, the number of open beach days in upper Narragansett Bay beach areas will increase.
- By 2008, the number of open shellfish days will increase by 47% in upper Narragansett Bay, and 77% in the southern upper Bay.
- By 2007, NBC will complete priority abatements at selected CSO outfalls, including Woonasquatucket River so that wet weather events lead to no more than 4 primary contact closures.

**Indicators:**

- Miles of beaches are consistently open for swimming during the season.
- Percent increase in boater use of pump-out facilities.
- Increase days upper bay shellfish areas are open

KEY STRATEGIES	EPA ACTIONS
1. Abate/eliminate sources of contamination to surface waters	<ul style="list-style-type: none"><li>• EPA-NE will promote 10 BMP's in 2002 for water quality restoration in Rhode Island with 319 NPS grants.</li><li>• EPA-NE based upon inspections and/or consultation with DEM will pursue an appropriate EPA enforcement strategy for water quality permitted facilities in Rhode Island in 2002.</li><li>• EPA-NE will provide technical support as needed to DEM's pretreatment program in 2002.</li><li>• EPA-NE will in 2002, based upon acceptable submission, approve Rhode Island's Phase II Stormwater Program.</li></ul>

KEY STRATEGIES	EPA ACTIONS
<p>1. <b><u>Continued:</u></b> Abate/eliminate sources of contamination to surface waters.</p>	<ul style="list-style-type: none"> <li>EPA-NE will assist URI, North Kingstown and DEM to implement the Supplemental Environmental Project for the septic system upgrades in Wickford Harbor by the end of 2004.</li> <li>EPA-NE will assist RI DEM and RI DOH and the Town of Barrington to address contamination issues and conduct outreach/education to residents around Woods Pond.</li> <li>EPA-NE and RI DEM will track reduction of pollutant loadings from implementation of “No Discharge Designation” to Rhode Island’s Coastal Waters.</li> </ul>
<p>2. Develop approvable and implementable watershed restoration strategies (TMDL’s) in Rhode Island.</p>	<ul style="list-style-type: none"> <li>EPA-NE will in 2002/2003, review TMDL’s with a goal of providing technical comments within 30 days from submission of a draft TMDL.</li> <li>EPA-NE will in 2002/2003, approve TMDLs with a goal of 30 days from submission of a final/ acceptable TMDL.</li> <li>EPA-NE will in 2002 evaluate opportunities to incorporate pollution prevention strategies with the Watershed Restoration Program, i.e., TMDLs.</li> <li>EPA-NE will in 2002, assist DEM to educate the Legislature to support funding for watershed restoration strategies.</li> </ul>

KEY STRATEGIES	EPA ACTIONS
<b>3. Provide financial and technical support to carry out restoration strategies.</b>	<ul style="list-style-type: none"> <li>EPA-NE will in 2002, continue to support the Clean Water SRF as a source of low interest loans for WWT facilities, and on-site system upgrades.</li> <li>EPA-NE in 2002, will assist DEM in the technical review of proposals for 319 NPS grants in 2002.</li> <li>EPA-NE will in 2002, participate in the Partnership for Narragansett Bay, to implement a mini grants program in Massachusetts and Rhode Island.</li> <li>EPA-NE will in 2002, partner with federal agencies to leverage funding for water quality improvements, e.g., NRCS, ACOE in interstate watershed.</li> <li>EPA-NE will work with URI-CE to evaluate the effectiveness of GMP's and WQ models.</li> </ul>

## GOAL I: CLEAN AND HEALTHY WATER

**Subgoal:** Surface Water

**Objective 2:** Maintain Water Quality: Maintain surface water quality.

**Environmental Outcome:**

All Rhode Island waters remain safe for recreational uses, fish and shellfish consumption, and support aquatic life.

**Target:**

- By 2002, complete community based Watershed Actions Plans for the Blackstone and Pawtuxet Rivers.
- Implement South County and Woonasquatucket River Action Plans.

**Indicators:**

- Reduction in threatened waterbodies from 305(b) report.
- Number of innovative septic system installations.
- Number of towns with alternative land use techniques adopted and implemented.

KEY STRATEGIES	EPA ACTIONS
1. Develop and implement strategies to Identify and protect pristine, good quality, and threatened waters from adverse impacts of development.	<ul style="list-style-type: none"> <li>EPA-NE will review the state's 305(b) report to identify and target EPA actions that will protect good water quality or threaten water resources.</li> <li>EPA-NE will conduct workshops of states on 305(b) monitoring in the Fall 2001.</li> </ul>
2. Manage watersheds to avoid or mitigate adverse impacts to designated uses.	<ul style="list-style-type: none"> <li>EPA-NE will conduct SPCC inspections and/or enforcement actions as needed in Rhode Island.</li> <li>EPA-NE will respond as needed to oil spill events in Rhode Island.</li> </ul>
3. Enhance and support local watershed management capacity and place - based protection priorities.	<ul style="list-style-type: none"> <li>EPA-NE and RI DEM to seek public/private funding partnerships to establish a Watershed Institute in R.I.</li> <li>EPA-NE will in 2002, participate in outreach/efforts, e.g., Rivers Day, Earth day, Envirothon to education public on Watershed Management Issues.</li> <li>EPA-NE will participate in the development of Watershed Action Plans for the Blackstone and Pawtuxet Rivers.</li> </ul> <p><b><u>South County and Woonasquatucket Watershed:</u></b></p> <ul style="list-style-type: none"> <li>EPA-NE will implement its responsibilities set forth in the South County Watershed Action Plan 2001-2004.</li> <li>EPA-NE will implement its responsibilities set forth in the Woonasquatucket Watershed Action Plan.</li> </ul> <p><b><u>Pawcatuck Watershed:</u></b></p> <ul style="list-style-type: none"> <li>EPA-NE will provide technical assistance to town planners to implement ground water protection overlay districts as needed (4.2.2).</li> <li>EPA-NE will continue to seek funding sources for the Water Resources Board to develop a Drought Alert Network on a statewide basis.</li> </ul>

KEY STRATEGIES	EPA ACTIONS
3. <b><u>Continued:</u></b> Enhance and support local watershed management capacity and place - based protection priorities.	<b><u>Salt Ponds:</u></b> <ul style="list-style-type: none"> <li>EPA-NE will provide technical support thru the URI Septic System Grant to implement a watershed - based on-site wastewater management program (strategy 2.1).</li> <li>EPA-NE will participate in seminars/ workshops to educate public on issued related wastewater management and water quality of well water (5.1.5).</li> </ul>

## GOAL I: CLEAN AND HEALTHY WATER

**Subgoal:** Surface Water

**Objective 3:** **Monitor Surface Water Quality:** Maintain effective monitoring programs.

**Environmental Outcome:**

Water Quality monitoring demonstrates that waters are safe for recreational uses, fish and shellfish consumption, and support aquatic life.

**Target:**

- By 2002, the State will have a comprehensive baseline monitoring strategy, including funding, in place.
- By 2003, the State will implement its monitoring plan, including comprehensive fish tissue monitoring to identify high risk species and locations.

**Indicators:**

- By 2003, the State will have an increase of baseline monitoring consistent with the monitoring strategy.
- Fish consumption advisories in place, as appropriate.

KEY STRATEGIES	EPA ACTIONS
<p>1. Establish water quality standards that reflect new and revised requirements.</p>	<ul style="list-style-type: none"> <li>• EPA-NE in 2002, will continue to assist in the development of guidance for bio-criteria in surface water.</li> <li>• EPA-NE will assist RI DEM in the evaluation of bio-assessment data.</li> <li>• EPA-NE will assist RI DEM to develop a plan by 12/31/01 to adopt numeric nutrient criteria for lakes and rivers into the state's water quality standards by 2004.</li> <li>• EPA-NE will participate in efforts to develop nutrient criteria guidance for lakes and rivers in New England by 12/31/01.</li> <li>• EPA-NE will by the end of 2004 work with Rhode Island to adopt nutrient water quality criteria for lakes and rivers .</li> <li>• EPA-NE will provide technical support to RI DEM to develop bio-criteria standards using results of FY2000 bio-monitoring study.</li> <li>• EPA-NE will in 2002, review in a timely fashion, proposed revisions to the state's water quality standards.</li> <li>• EPA-NE in 2002, will continue to assist state in developing criteria to manage water withdrawals and uses consistent with State Water Quality Standards.</li> <li>• EPA-NE and RI DEM with the URI-CJ will sponsor an environmental indicator's workshop in the Fall of 2001.</li> </ul>



KEY STRATEGIES	EPA ACTIONS
<p>2. Establish comprehensive baseline monitoring programs in surface waters/habitat in Rhode Island</p>	<ul style="list-style-type: none"> <li>• EPA-NE will in 2002, assist R.I. Department of Health (RI DOH) to implement beach monitoring program recommendations from EMPACT project.</li> <li>• EPA-NE will provide training as needed to enhance volunteer monitoring programs in Rhode Island.</li> <li>• EPA-NE will conduct a regional wadeable streams project (including several sites in R.I.), and provide data to the state.</li> <li>• EPA-NE will conduct preliminary evaluation of state's monitoring programs, identify gaps with a comprehensive strategy.</li> <li>• EPA-NE will review completed QAPP's within 60 days of submittal on projects receiving federal funds.</li> <li>• EPA-NE will conduct an assessment of capability to upload state EDAS data into STORET.</li> <li>• EPA-NE in 2002, will continue to assist state in developing and implementing a fish tissue monitoring program.</li> <li>• EPA-NE will submit final report from the summer 2000 Random Sampling Design (RSD) Study in 2002.</li> </ul>

KEY STRATEGIES	EPA ACTIONS
3. Monitoring to support site specific projects and assessments.	<ul style="list-style-type: none"> <li>EPA-NE will in 2002, conduct/ participate in field monitoring studies for the following: <ul style="list-style-type: none"> <li>- Mashapaug Pond TMDL</li> <li>- Kickamuit Reservoir</li> <li>- Green Hill Pond, Block Island, South Kingston septic system demonstration project</li> <li>- Woonasquatucket Wet Weather Monitoring w/NBC.</li> <li>- Other monitoring to be determined.</li> </ul> </li> </ul> <p><b><u>Pawcatuck Watershed:</u></b></p> <ul style="list-style-type: none"> <li>EPA-NE to provide sampling support (3.1.3) as needed.</li> </ul> <p><b><u>Salt Ponds:</u></b></p> <ul style="list-style-type: none"> <li>EPA-NE will provide technical sampling support as needed (4.1.4).</li> </ul>

## GOAL II. CLEAN AND HEALTHY AIR

**Objective 1: Ozone:** Reduce ozone exceedance days in each non-attainment area.

**Public Health Outcome:**

Citizens of Rhode Island will have clean healthy air to breathe and air pollutants will not damage forests, land, and water bodies.

**Targets:**

- By 2007, Rhode Island will meet the federal ozone standard.

**Indicators:**

- Three-year average of the number of days exceeding the eight-hour ozone standard.
- % of VOC's reduced from new rules.

KEY STRATEGIES	EPA ACTIONS
<p>1. Develop new standards and enforcement of old standards for power plants and other combustion sources.</p>	<ul style="list-style-type: none"> <li>• Consistent with court decisions, EPA-NE will ensure implement of Nox SIP call and Section 126 requirements to reduce by May 2004 a total of 1.1 million tons of Nox impacting air quality in R.I.</li> <li>• Contingent upon Administration review of NSR enforcement initiative, EPA-NE will pursue, settle and litigate NSR violations by power plants, whose emissions impact R.I.'s air quality.</li> <li>• EPA-NE will work with R.I. on adoption and approval of revised Nox control rules (Nox SIP call revisions and OTC model Nox rules).</li> </ul>
<p>2. Implement enhanced automobile testing.</p>	<ul style="list-style-type: none"> <li>• As needed, EPA-NE will provide assistance to DEM on implementation issues. PEA will also assist R.I. to develop on-board diagnostics (OBD II) testing requirements that meet EPA requirements.</li> </ul>
<p>3. Implement effective VOC control programs.</p>	<ul style="list-style-type: none"> <li>• EPA-NE/R.I. DEM to determine appropriate number of VOC inspections.</li> <li>• EPA-NE will work with state on adoption, and then EPA approval, of consumer, AIM, and gas container VOC control rules.</li> </ul>
<p>4. Promote alternative, less polluting fuels.</p>	<ul style="list-style-type: none"> <li>• EPA-NE will participate in the selection of CMAQ projects by R.I. MPO.</li> </ul>

5. Ensure adequate public education on ozone in Rhode Island.	<ul style="list-style-type: none"> <li>EPA-NE will continue to generate ozone forecast maps for Northeast and distribute to public and media outlets. EPA-NE will continue to distribute Smog Alert messages to interested parties in R.I. when DEM forecasts unhealthy ozone levels.</li> <li>EPA-NE will issue press releases when multiple states in N.E. forecast unhealthy ozone levels.</li> </ul>
6. Ensure that data is of good quality and sound science.	<ul style="list-style-type: none"> <li>EPA-NE completes review and approval of State PAMS QAPP.</li> <li>EPA-NE will provide training on new AIRS system to insure 75% data capture.</li> </ul>

## GOAL II. CLEAN AND HEALTHY AIR

**Objective 2: Particulate Matter:** Reduce regional haze and unhealthy levels of particulate matter.

**Public Health Outcome:**

Citizens of Rhode Island will breathe clean and healthy outdoor air which meets EPA-NE's health-based ambient air quality standards for particulate matter.

**Targets:**

- By 2007, meet health-based standards for particulate matter.

**Indicators:**

- Number of days Rhode Island meets federal standards.
- Number of alternative fuel vehicles.

KEY STRATEGIES	EPA ACTIONS
1. Development of programs to reduce diesel particular emissions.	<ul style="list-style-type: none"> <li>EPA-NE will work with RI to identify initiatives that encourage retrofits on diesel vehicles.</li> <li>EPA-NE will work with R.I. to identify initiatives that encourage alternative fuels.</li> <li>EPA-NE will provide assistance, as needed, to help R.I. establish a testing program.</li> </ul>
2. Implement a Particulate Monitoring Program in Rhode Island that will result in quality data.	<ul style="list-style-type: none"> <li>EPA-NE will provide technical assistance and network support.</li> <li>EPA-NE will provide training on new AIRS system to insure 75% data capture.</li> <li>EPA-NE will conduct a Technical Systems Audit for R.I. in 2003.</li> </ul>
3. Conduct stack testing and continuous emission monitoring in Rhode Island.	<ul style="list-style-type: none"> <li>Monitoring needs TBD.</li> <li>EPA-NE will in 2002, consult with R.I. DEM on appropriate enforcement.</li> </ul>
4. Participate in regional plan to develop a long-term haze strategy for the Northeast.	<ul style="list-style-type: none"> <li>EPA-NE will provide funding and assistance to the regional planning organization, and will participate in the technical workgroups.</li> </ul>

## GOAL II: CLEAN AND HEALTHY AIR

**Objective 3: Criteria Air Pollutants:** Maintain healthy ambient levels of criteria air pollutants (carbon monoxide, sulfur dioxide, nitrogen oxides, lead).

**Public Health Outcome:**

Citizens of Rhode Island will breathe clean and healthy outdoor air which meets EPA's health-based ambient air quality standards for carbon monoxide, sulfur dioxide, nitrogen oxides and lead at all times.

**Targets:**

- As of 2001, Rhode Island outdoor air quality will meet the air quality standards for carbon monoxide, sulfur dioxide, nitrogen oxides and lead at all times.

**Public Health Indicator:**

- All monitors in Rhode Island report monitoring data meeting the ambient air quality standards.

KEY STRATEGIES	EPA ACTIONS
1. Ensure all new or modifying major sources install state of the art control technologies.	<ul style="list-style-type: none"><li>• EPA-NE will review and provide constructive comments on 100% of major New Source Review (NSR) permits, with a goal of ensuring that BACT/LAER and other NSR requirements are met.</li></ul>
2. Ensure that Title V permits program results in effective and clear operating permits to all major sources.	<ul style="list-style-type: none"><li>• EPA-NE will propose and take final action on full approval of RI's Title V program.</li><li>• EPA-NE will review and provide constructive comments on 100% of Title V draft permits</li><li>• EPA-NE will provide a regional training for citizens'/advocacy groups on Title V permitting.</li></ul>
3. Maintain effective ambient monitoring network to ensure that air quality standards are met.	<ul style="list-style-type: none"><li>• EPA-NE will provide training on new AIRS system to insure 75% data capture.</li></ul>
4. Ensure that monitoring network has sound data quality.	<ul style="list-style-type: none"><li>• As state submits QAPPs according to schedule, OEME will review within 60 days of submittal.</li></ul>
5. Ensure strong enforcement of permits programs.	

## GOAL II: CLEAN AND HEALTHY AIR

**Objective 4: Air Toxics:** Reduce ambient concentration and exposure to air toxics.

**Public Health Outcome:**

Citizens of Rhode Island will breathe clean and healthy outdoor air which does not pose an unreasonable risk to public health.

**Targets:**

- By 2005, EPA and RI DEM will have better information on ambient levels of air toxics and the risks to human health, and the levels of the air toxics posing the greatest risks will have declined.

**Public Health Indicator:**

- Ambient concentrations of benzene, 1,3 butadiene and formaldehyde.

KEY STRATEGIES	EPA ACTIONS
1. Provide the public better information on the public exposure to, and risk from, ambient air toxics.	<ul style="list-style-type: none"><li>• EPA will keep DEM informed of the National Air Toxics Assessment (NATA) tools and any changes or revisions as a result of the Scientific Advisory Board Review.</li><li>• EPA will share a New England-specific analysis of the NATA data, conducted by the EPA NE.</li><li>• EPA will provide NESCAUM states with training on air toxics risk communication.</li></ul>

<p>2. Ensure that the emission standards for sources of air toxics (including the MACT and NSPS standards) are properly implemented.</p>	<ul style="list-style-type: none"> <li>• EPA-NE will work with DEM on DEM's acceptance of delegation of new MACT and NSPS standards.</li> <li>• EPA-NE will provide technical assistance and review of alternative toxics standards (Section 112(l) submittals) submitted by RI DEM, including the solvent degreasing regulations. PEA will prepare and publish a Federal Register notice to take action on RI Section 112(l) packages.</li> <li>• EPA-NE will hold an air toxics workshop to provide assistance and training to states on implementation of air toxics standards.</li> </ul>
<p>3. Work to establish an effective ambient monitoring network for air toxics in New England.</p>	<ul style="list-style-type: none"> <li>• EPA-NE will provide funding for the Providence air toxics monitoring pilot project.</li> <li>• EPA-NE will also provide technical assistance and quality control for lab analysis.</li> <li>• EPA-NE will provide training on new AIRS system to insure 75% data</li> </ul>



## GOAL II: CLEAN AND HEALTHY AIR

**Objective 5: Healthy Climate/Atmosphere:** Reduce carbon dioxide and non-carbon dioxide greenhouse emissions.

**Environmental Outcome:**

Rhode Island will contribute to the effort to reduce greenhouse gas emissions affecting the global climate.

**Targets:**

- By 2010, Rhode Island greenhouse gas emissions will be substantially reduced through programs and policies that lead to reduce costs to consumers of energy and reduced emissions leading to cleaner air and water. In the Nation, EPA programs are expected to offset forecasted growth by 20-35 percent relative to 1990 emission levels, equivalent to annual reductions of between 130 and 200 million metric tons of carbon equivalent in 2010.

**Environmental Indicator:**

- Emissions of carbon dioxide and non-carbon dioxide greenhouse gas emissions.

KEY STRATEGIES	EPA ACTIONS
1. Implement voluntary programs designed to increase energy efficiency, including EPA's Energy Star and Green Lights programs.	<ul style="list-style-type: none"><li>• Continue to recruit partners in Rhode Island, focused on schools, colleges and universities, cities and towns and state governmental buildings and purchasing policies.</li></ul>
2. Implement transportation programs designed to reduce vehicle miles traveled (VMTs).	<ul style="list-style-type: none"><li>• Provide grants for "Clean Air Communities," awarded to communities with good programs designed to reduce emissions and VMTs. (See Livable Communities.)</li></ul>

3. Promote energy efficiency and conservation in electricity generation	<ul style="list-style-type: none"> <li>EPA is planning a conference in mid-July for all New England states to discuss electricity reliability and air quality, focusing on how to improve efficiency and promote clean power.</li> </ul>
4. Develop greenhouse gas inventories and action plans (including demonstration programs for emission trading) by states, municipalities and private companies	<ul style="list-style-type: none"> <li>EPA-NE is working with the International Council for Local Environmental Initiatives (ICLEI) to recruit additional towns and cities to develop inventories and action plans.</li> <li>EPA-NE will run grant program for development of action plans (RI is applying for such a grant)</li> </ul>
5. Provide technical and policy support for the development of a Regional Action Plan by the New England states and Eastern Canadian Premiers	<ul style="list-style-type: none"> <li>EPA-NE will actively participate in the steering committee working to develop this action plan and will provide information and assistance as needed.</li> </ul>

## GOAL II: CLEAN AND HEALTHY AIR

**Objective 6: Atmospheric Deposition:** Reduce deposition of acid rain and mercury from atmosphere onto land and water bodies.

**Environmental Outcome:**

Rhode Island will contribute to the effort to reduce greenhouse gas emissions affecting the global climate.

**Targets:**

- By 2005, annual emissions of nitrogen oxides from electric power generation sources in the United States will be reduced by 2 million tons from projected levels and total nitrogen deposition will be reduced to 1990 levels. By 2010, annual sulfur dioxide emissions from electric power generation sources in the United States will be reduced by 8.5 million tons and total sulfur deposition will be reduced by 30 percent from 1990 levels.

**Environmental Indicator:**

- Sulfate and nitrate deposition levels and mercury deposition rates.

KEY STRATEGIES	EPA ACTIONS
1. Implement the Acid Rain Program, which obtains significant reductions of SO <sub>2</sub> and NO <sub>x</sub> from power plants which impact deposition throughout New England.	<ul style="list-style-type: none"> <li>EPA-NE will continue to run the allowance trading program for power plants subject to the acid rain program.</li> <li>EPA-NE will provide technical assistance and review of monitoring plans for any new power plants in R.I.</li> <li>EPA-NE will continue tracking SO<sub>2</sub>, NO<sub>x</sub> and CO<sub>2</sub> emissions from power plants subject to the Acid Rain program.</li> </ul>
2. Implement EPA-NE's mercury action plan.	<ul style="list-style-type: none"> <li>Ensure compliance by incinerators subject to EPA-NE and state mercury emission standards for municipal waste incinerators and medical waste incinerators.</li> <li>Implement the Mercury Challenge Program for Hospitals, which provides assistance and publicity for hospitals which commit to reduce mercury use.</li> <li>Continue to work with NEGC/ECP task force on regional steps to reduce mercury use.</li> <li>Continue to provide information and education materials on mercury.</li> </ul>

### GOAL III: HEALTHY COMMUNITIES

**Objective 1: Healthy Children:** Protect children from environmental health threats by improving the quality of the environments where children spend their time: at school, at home, and outdoors.

**Public Health Outcome:**

All Rhode Island children will be free from exposure to toxic substances.

**Target:**

- By 2010, no children will have elevated blood Pb levels.
- By 2005, 50% of all R.I. schools will be implementing an Indoor Environments protocol.

**Indicators:**

- Reduce the number of children with elevated blood Pb levels 10% by 2005.
- Reduce asthma and respiratory triggers associated with indoor air quality in urban areas.

KEY STRATEGIES	EPA ACTIONS
1. Coordinate and implement a Lead Strategy in Rhode Island. Assist RIDOH and RI DEM to organize and implement R.I. statewide lead coalition effort.	<ul style="list-style-type: none"><li>• EPA-NE will distribute lead outreach materials to 5 community organizations working on lead poisoning in urban areas.</li><li>• EPA-NE will assist R.I. House and Mortgage Finance Corp. and RI DOH to implement a Lead Safe Yards Project at 30 day care center sites in urban communities.</li><li>• EPA-NE will enforce 406b regarding real estate transactions and disclosure of lead poisoned children at sale or lease.</li></ul>
2. Implement programs to assist in protecting the public health of children in school.	<ul style="list-style-type: none"><li>• EPA-NE will work with RI DOH and R.I. Chapter of American Lung Association to bring 10 schools in R.I. into the “Tools for Schools” Program in 2002.</li><li>• Pounds of chemicals removed from schools</li><li>• Number of chemical inventories that occur in K-12 schools.</li></ul>

KEY STRATEGIES	EPA ACTIONS
2. <b>Continued:</b> Implement programs to assist in protecting the public health of children in school.	<ul style="list-style-type: none"> <li>EPA-NE will assist one “Showcase school” in RI to access a broad spectrum of programs directed towards clean indoor air, healthier building construction, safe use/storage of chemicals and education of students in 2002.</li> <li>EPA-NE will conduct workshops for high schools and vocational schools to educate teachers and administrators on the safe use, storage, and disposal of chemicals and equipment.</li> <li>EPA-NE will assist Cranston LEPC to remove hazardous chemicals from schools using local authorities.</li> <li>EPA-NE will use enforcement goals, e.g., SEP’s to protect children’s health in schools.</li> </ul>
3. Implement an Asthma/Indoor Air Quality Strategy in places where children learn, live, and play in R.I.	<ul style="list-style-type: none"> <li>EPA-NE will work with one HMO in R.I. to adopt environmental trigger prevention efforts in 2002.</li> <li>EPA-NE will initiate 10 education efforts on asthma and sick buildings in 2002.</li> <li>EPA-NE will support 2 asthma coalitions in R.I. in 2002.</li> </ul>
4. Implement a comprehensive Asbestos in Schools Strategy in R.I.	<ul style="list-style-type: none"> <li>EPA-NE will support one education/outreach initiative in 2002.</li> </ul>
5. Ensure that data collected to support public health protection in Rhode Island is of good quality and sound science.	<ul style="list-style-type: none"> <li>EPA-NE will review complete QAPP’s within 60 days of submittal.</li> </ul>

### GOAL III: HEALTHY HUMAN COMMUNITIES

**Objective 2: Livable Communities:** Restore, revitalize, and protect urban environments and reduce sprawl in suburban and rural areas in Rhode Island. Restore previously polluted sites for community, ecological, or economic re-use.

**Environmental Outcome:**

Increase in urban greenspace, improved water quality from control of NPS run-off, improved urban air quality.

- Targets:**
- By January 2002, Grow Smart Rhode Island will have assessed the location, number and characteristics of vacant/underused industrial and commercial properties in Rhode Island.
  - By 2004, develop and implement a Rhode Island Urban Design Manual.

**Indicators:**

- Rate of productive reuse of urban vacant lots and brownfields increases.
- Rate of progress to implement UEI upscale model for Rhode Island.
- Number of outreach presentations in the Woonasquatucket.

KEY STRATEGIES	EPA ACTIONS
1. Implement programs and projects designed to restore the urban environment and protect the public health of residents in urban centers.	<ul style="list-style-type: none"><li>• EPA-NE will develop a concept paper for the preliminary state upscale/transition for the Urban Environmental Initiative Program in Rhode Island in 2002.</li><li>• EPA-NE will revise and finalize the statewide model design for the UEI program and gather data on critical urban environment and public health problems facing residents in 1 to 3 R.I. cities.</li><li>• EPA-NE will identify and establish statewide coordinating bodies or committees to begin designing and implementing 4 UEI program areas in 1 - 3 R.I. cities by 2003. Focus will be on urban rivers, fish consumption issue and lead.</li></ul>

KEY STRATEGIES	EPA ACTIONS
<p><b>1. (Continued)</b> Implement programs and projects designed to restore the urban environment and protect the public health of residents in urban centers.</p>	<ul style="list-style-type: none"> <li>• EPA-NE will work with NRCD to deliver approximately 80 outreach presentations to school and adult audiences concerning PCB, dioxin and nutrient pollution in the Woonasquatucket Watersheds in 2002.</li> <li>• EPA-NE will continue to expand the Urban Rivers Team to a statewide focus by recruiting environmental/ watershed organizations to research, restore, and protect urban water bodies.</li> <li>• EPA-NE will assist potential applicants for target Brownfield site assessments as needed in Rhode Island.</li> <li>• EPA-NE will participate as appropriate to implement the recommendations of Grow Smart Rhode Island Brownfield Conference.</li> <li>• EPA-NE will continue to assist RI DEM to implement the voluntary Cleanup Program MOA to expedite cleanup of waste sites.</li> <li>• EPA-NE will fund an Urban Design Manual with other partners to provide design criteria and technical guidance for urban revitalization that incorporates environmental protection.</li> </ul>

KEY STRATEGIES	EPA ACTIONS
2. Implement actions directed to reducing urban sprawl while promoting Smart Growth planning and principles.	<ul style="list-style-type: none"> <li>EPA-NE will support the Governor's Growth Planning Council and recommendations related to priority funding areas to reduce urban sprawl.</li> <li>EPA-NE will support the Rhode island Planning Institute as a provider of technical assistance to RI cities and towns.</li> <li>EPA-NE will in 2002, participate in an infrastructure workgroup to address barriers to decentralized wastewater treatment and community water supply to promote village center concepts.</li> <li>EPA-NE will use our NEPA and Sole Source Aquifer Authority to review federal actions to ensure they do not result in sprawl and degradation of natural resources.</li> <li>EPA-NE will continue to facilitate the Livable Communities federal partners to collectively promote Smart Growth practices in R.I., e.g., collaborative work to rehabilitate downtown North Providence.</li> </ul>

### GOAL III: HEALTHY COMMUNITIES

**Objective 3: Toxic and Substances and Pesticides:** Reduce exposure of Rhode Island's citizens to pesticides and toxic substances.

**Environmental Outcome:**

**Targets:**

- Reduce by 50% the number of occupied buildings with high radon levels.
- Reduce PBT pollutants by 10%.
- Ag target TBD jointly by end of 2002.



**Indicators:**

- Reduced number of cancer rates in Rhode Island.
- Number/lbs of PBT's removed from the environment.
- Reduced lbs of pesticides sold/used.
- Reductions in toxic emissions.

KEY STRATEGIES	EPA ACTIONS
1. Implement programs and actions that result in reduced exposure to toxic chemicals	<ul style="list-style-type: none"><li>• EPA-NE will in 2002, assist industry and business to reduce the discharge of toxic chemicals as reported in the Toxic Release Inventory.</li><li>• EPA-NE will in 2002, approve 2 PCB clean-up plans in Rhode Island.</li><li>• EPA-NE, based upon inspections, will take appropriate PCB enforcement actions.</li><li>• EPA-NE in 2002, will implement the Regional Mercury Action Plan with the six New England States.</li></ul>
2. Implement EPA Radon Action Plan with RI DOH.	<ul style="list-style-type: none"><li>• EPA will in 2002, conduct two outreach education efforts related to the regional radon plan in Rhode Island.</li></ul>
3.. Implement a comprehensive EPA/ Agriculture coordination strategy which integrates programs under FIFRA and the CWA in New England states.	<ul style="list-style-type: none"><li>• EPA-NE will in 2002, provide DEM technical support to ensure the state meets OPP levels of attainment.</li><li>• EPA-NE will in 2002, meet with RI DEM, USDA, RI DOH to discuss actions related to EPA's implementation of a strategic agriculture initiative in Rhode Island</li></ul>

### GOAL III: HEALTHY COMMUNITIES

**Objective 4: Waste Sites:** Make previously polluted sites safe for communities.

**Environmental Outcome:**

Rhode Island public health and environment will be free from exposure to risks from uncontrolled releases from solid or hazardous waste handlers, contaminated facilities/sites, and oil storage sites.

KEY STRATEGIES	EPA ACTIONS
<p>1. Minimize or eliminate the impacts and risks to human health from releases of oil, chemicals, or waste.</p>	<ul style="list-style-type: none"> <li>• EPA-NE will in 2002, complete superfund NPL operable unit clean-ups of contaminated soils at the following Rhode Island sites: <ul style="list-style-type: none"> <li>- Complete the soil treatment remedial Action at the Davis Liquid waste site.</li> <li>- Complete negotiations for remedial design/action at Rose Hill Landfill.</li> <li>- Oversee PRP Superfund removal action at the Centredale Manor Restoration Project, including repairing Allendale Dam and removal of contamination at residential properties.</li> </ul> </li> <li>• Begin RIFS at West Kingston Town Dump/URI Disposal area.</li> <li>• EPA-NE will, with RI DEM, target EPA inspections to ensure that facilities are complying with UST corrosion and leak detection requirements and fund LUST cleanups.</li> <li>• EPA-NE will undertake removal action at: <ul style="list-style-type: none"> <li>- Rhode Island Technical Plating - Cranston</li> <li>- TD Mack Factory - E. Providence.</li> </ul> </li> </ul>
<p>2. Monitor the “Rhode Island Watch List” for candidates to the NPL and take appropriate actions.</p>	<ul style="list-style-type: none"> <li>• EPA-NE will continue site assessment actions on the following sites: <ul style="list-style-type: none"> <li>- Danielson Pike Groundwater</li> <li>- R+R Sentry</li> <li>- Coventry Municipal Landfill</li> <li>- Lancashire Street Disposal Area</li> <li>- Bible Speaks</li> <li>- Smithfield Chemical/Industrial Dump</li> <li>- M. Earl Adams, Inc.</li> <li>- Foster Nike Control Area</li> <li>- N. Smithfield Contaminated Sites</li> </ul> </li> </ul>

3. Conduct monitoring and assessments and ensure good quality data.	<ul style="list-style-type: none"> <li>EPA-NE will work towards integrating environmental data from site assessments with other EPA programs under the CWA, e.g., TMDL's, 305(b) reports.</li> <li>EPA-NE will review Quality Assurance Project Plans within 60 days of submittal.</li> </ul>
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### GOAL III: HEALTHY COMMUNITIES

#### Sustainable Regulated Communities:

**Objective 5: Increase Compliance in the Regulated Community:** Reduce pollution across media through increased compliance.

KEY STRATEGIES	EPA ACTIONS
1. Conduct recon investigation for illegal operators in target geographic areas or priority watersheds.	<ul style="list-style-type: none"> <li>Recon location to be selected later in the year (may or may not be in Rhode Island).</li> </ul>
2. Take appropriate response actions based upon public complaints on illegal violations.	<ul style="list-style-type: none"> <li>Public complaints are either responded to by EPA-NE or referred to an appropriate state or local agency.</li> </ul>
3. Conduct risk-based targeting to conduct inspections and appropriate enforcement actions.	<ul style="list-style-type: none"> <li>EPA-NE's national priorities include Clean Water Act wet weather issues (sanitary sewer overflows, combined sewer overflows, concentrated animal feeding operations, and storm water); Safe Drinking Water Act microbial rules; Clean Air Act New Source Review/Prevention of Significant Deterioration and air toxics rules; and RCRA permit evaders. In addition to these areas, key regional priorities include public agencies; colleges and universities; and lead paint rules.</li> </ul>
4. Conduct field monitoring studies to support regulatory compliance and enforcement.	See Above.

## GOAL III: HEALTHY COMMUNITIES

### Sustainable Regulated Communities:

**Objective 6: Sustainable Performance in the Regulated Community:** Decrease pollution across media through sustainable performance and behavior change.

KEY STRATEGIES	EPA ACTIONS
1. Implement sector-based environmental audit policy in Rhode Island.	<ul style="list-style-type: none"><li>• EPA-NE will assist RI DEM to develop a self-certification program for auto body shops.</li><li>• EPA-NE will in 2002, conduct an Environmental Audit Workshop for Public Works facilities in Rhode Island in conjunction with the New England Chapter of the American Public Works Association.</li><li>• EPA-NE will work with NBC to develop a pilot program with metal finishers to determine to use "Pollution Prevention Audits" in the proposed Metal Products and Machinery Pollution Prevention Standard.</li></ul>
2. Utilize partnerships with sector representatives to promote performance/ behavior change.	<ul style="list-style-type: none"><li>• EPA-NE will in 2002, seek opportunities to speak before business and industry organizations to encourage involvement and participate in promoting programs which go beyond compliance.</li></ul>
3. Implement cross-cutting Environmental Management System (EMS) programs in Rhode Island.	<ul style="list-style-type: none"><li>• EPA-NE with NBC develop "Environmental Best Management Plans" for art studio and art classes in colleges, autobody repair facilities and high temperature boiler operations.</li></ul>
4. Establish state EMS partnerships in Rhode Island, including incentive, recognition programs and education/infrastructure development.	<ul style="list-style-type: none"><li>• EPA-NE will in 2002, participate in RI DEM's stakeholder process that will result in the establishment of an Environmental Leadership Program. EPA-NE will assist RI DEM, the Tellus Institute and other partners to launch this new initiative.</li></ul>

5. Develop programs and education initiatives to improve sector-based capacity to implement innovation programs.	<ul style="list-style-type: none"> <li>EPA-NE to complete marina environmental performance guidance document conduct workshop for marina operators and establish on-line web site for assistance.</li> </ul>
6. Implement innovative technology efforts through Outreach and education.	<ul style="list-style-type: none"> <li>EPA-NE's Center for Environmental and Innovative Technology will publish the "Envirotech News" to connect technology developers with potential technology users and to disseminate time critical information relevant to the environmental technology industry. EPA-NE can assist Rhode Island to search for technologies to meet permit limits and to respond to challenging problems.</li> <li>EPA-NE will have 2 virtual trade shows on the CEIT web site in 2002 on NPS pollution septic systems and stormwater technologies</li> </ul>
7. Assist the regulated community to develop and implement XL projects in Rhode Island.	<ul style="list-style-type: none"> <li>EPA-NE will assist RI DEM and NBC to launch the Project XL Pretreatment Initiative.</li> </ul>

## GOAL IV: HEALTHY ECOSYSTEMS

**Objective 1: Aquatic Ecosystems:** Increase quantity and quality of Rhode Island's aquatic ecosystems: wetlands, fresh water and marine habitats including eelgrass beds.

### **Environmental Outcome:**

Rhode Island's habitats and resources are capable of sustaining key ecological functions and services

### **Targets:**

- By 2005, replace all losses of existing wetland acreage by an average of 2:1.
- By 2004, preserve existing wetland acreage and increase adjacent buffers by 100 acres.
- By 2005, all Rhode Island communities will have build out analyses complete to assess development trends on habitat.

### **Indicators:**

- There is no net loss of existing wet land acreage.
- Rate of isolated wetlands destruction decreases.

- Progress in developing and implementing wetland protection database.
- Number of towns adopt and implement wetland protection strategy.
- Number of outreach workshops and technical presentations.
- Up and running Vernal Pool Website.

KEY STRATEGIES	EPA ACTIONS
1. Develop data to characterize essential habitat requirements.	<ul style="list-style-type: none"> <li>• Participate in biological monitoring &amp; prioritization of local community wetlands..</li> <li>• Support improved data collection and mapping technology to protect coastal and fresh water wetlands.</li> <li>• EPA-NE will in 2002, participate with USGS, RI DEM to complete the assessment of water withdrawal impacts on aquatic habitat in the Usquepaug Watershed.</li> <li>• EPA-NE will in 2002, participate in a workgroup to assess low flow characteristics of Rhode Island streams, e.g., Blackstone, to sustain healthy aquatic habitats.</li> </ul>
2. Project future trends to avoid adverse future impacts on critical habitats and resources.	<ul style="list-style-type: none"> <li>• Monitor atmospheric deposition on key terrestrial habitats such as forested systems.</li> <li>• Climate changes, greenhouse gas trends.</li> <li>• Provide technical support to complete conservation plans.</li> <li>• Insure publication status &amp; trends annual report for wetlands.</li> <li>• Support Woonasquatucket action plan.</li> <li>• Continue isolated wetland protection</li> <li>• Develop regional biological assessment project and participate in regional workgroups to develop wetland biological criteria.</li> </ul>
3. Implement regulatory programs to protect important ecosystems and avoid /or mitigation environmental impacts.	<ul style="list-style-type: none"> <li>• Participate in program general permit process.</li> <li>• Perform PGP monitoring.</li> <li>• Enforcement actions</li> <li>• Incorporate ecosystem needs into regulatory decisions, e.g., ROD's.</li> <li>• EPA-NE will promote use of 319 funding for habitat restoration.</li> </ul>
4. Wetland Educational Outreach Initiatives	<ul style="list-style-type: none"> <li>• Support wetland outreach/municipal workshops.</li> </ul>

## GOAL IV: HEALTHY ECOSYSTEMS

**Objective 2: Diverse Habitats and Sensitive Development:** Implement approaches to permanently protect habitat, including promoting ecologically sensitive development of unprotected land.

**Environmental Outcome:**

Rhode Island's critical habitats and resources are capable of sustaining key ecological functions and services

**Targets:**

- By June 2002, at least one South County community will have adopted the principles from the South County Design Manual into their local regulations.
- By February 2002, the Planning Institute will have developed their curriculum agenda and developed and delivered training for the new Building Rehabilitation Code.
- By 2003, GIS coverage will include major wildlife and habitat corridors, including key parcels for priority acquisition.

**Indicators:**

- Rate of greenfields development decreases.
- Rate of increase in VMT decreases.

KEY STRATEGIES	EPA ACTIONS
1. Develop data to support better siting and land-protection/acquisition decisions.	<ul style="list-style-type: none"><li>• Identify habitat requirements, including migration and breeding corridors, for important terrestrial species.</li><li>• Develop methods to quantify services and benefits provided by unimpaired habitats and ecological functions.</li></ul>
2. Support innovative development approaches, including compact and transit-oriented development.	<ul style="list-style-type: none"><li>• Explore incentives for better siting and design.</li><li>• If FY02 funding allows, fund one or more smart growth projects in the state.</li></ul>
3. Promote performance standards for development that incorporate environmental measures.	<ul style="list-style-type: none"><li>• Work with RI DEM to implement their South County Design Manual, and to develop their Urban Design Manual.</li><li>• Work with the Planning Institute to help develop and deliver growth-related training to local officials and others.</li></ul>

## GOAL IV: HEALTHY ECOSYSTEMS

**Objective 3: Protect Marine Habitat:** Protect Rhode Island's marine and coastal habitats. Minimize adverse impact from marine dredging and disposal of materials.

**Environmental Outcome:**

Rhode Island's critical habitats and resources are capable of sustaining key ecological functions and services.

**Targets:**

- By 2010, eliminate nutrient loadings from CSO's and WWTP's to urban rivers and waters of upper Narragansett Bay.
- By 2005, replace any loss of existing coastal wetland, salt marsh, or submerged aquatic vegetation by a ratio of 2:1.
- By 2005, remove barriers to anadromous fish in the Kickemuit, Blackstone, and Ten-Mile Rivers.

**Indicators:**

- DO Levels are adequate to support marine/estuarine aquatic life or to maintain current adequate levels.
- There is no net loss of existing acreage of wetlands, salt marsh, and SAV.
- Viable anadromous fish runs return to the Kickemuit, Blackstone, and Ten-Mile Rivers.

KEY STRATEGIES	EPA ACTIONS
1. Identify all critical coastal and marine habitats and resources.	<ul style="list-style-type: none"><li>• Support NBEP and RI Habitat Restoration Team to map and analyze habitat trends and restoration opportunities.</li><li>• Identify funding opportunities with federal partners.</li></ul>
2. Develop data to support resource decisions.	<ul style="list-style-type: none"><li>• Evaluate fisheries and water quality information related to Brayton Point power plant in Mt. Hope Bay.</li><li>• EPA-NE will issue draft permit for Brayton Point Power Plant discharge.</li><li>• EPA-NE will participate in the annual DO survey of Narragansett Bay</li><li>• Support collection/dissemination of real-time water quality data in upper Narragansett Bay.</li><li>• Identify and analyze threats to coastal and marine resources from CERCLIS and Superfund sites.</li></ul>



<p>3. Support R.I.'s restoration of coastal and marine habitats and resources.</p>	<ul style="list-style-type: none"> <li>• Promote use of SEPs for restoration.</li> <li>• Leverage EPA funds to maximize other federal and non-federal support for restoration.</li> <li>• Promote beneficial reuse of clean dredged material.</li> <li>• Participate in the Habitat Restoration Team</li> <li>• Develop strategy to promote use of SRF for habitat restoration.</li> <li>• Ensure that remediation at federal facilities is managed to promote habitat restoration.</li> </ul>
<p>4. Develop administrative tools to reduce nutrient inputs to coastal and marine ecosystems.</p>	<ul style="list-style-type: none"> <li>• Ensure permits issued in Massachusetts are protective of RI aquatic resources; e.g., Mt. Hope Bay and Blackstone River.</li> <li>• Ensure MPRSA permits are protective of aquatic life.</li> <li>• Participate in PGP process to ensure adequate protection of coastal wetlands, salt marshes, and SAV.</li> </ul>